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SEQUENCE LISTING

<110> Lok, Si
Conklin, Darrell C.
Lofton-Day, Catherine E.

<120> Antibodies That Bind Testis-Specific
Insulin Homolog Polypeptides

<130> 96-06C3

<140> 09/617,389

<141> 2000-07-17

<150> 09/339,148

<151> 1999-06-24

<150> 08/905,267

<151> 1997-01-18

<150> 60/023,213

<151> 1996-02-08

<150> 60/031,592

<151> 1996-11-21

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<211> 566

<212> DNA

<213> Rattus norvegicus

<220>

<221> CDS

<222> (1)...(566)

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1 5 10 15

gct cct ttc tcc cag gaa caa gaa gag gtc acc agc ccc acg aag ttg 96
Ala Pro Phe Ser Gln Glu Gln Glu Val Thr Ser Pro Thr Lys Leu
20 25 30

tgc ggc agg gac ctg ttg gta gaa gtt ata aaa ctc tgt ggc caa aat 144
Cys Gly Arg Asp Leu Leu Val Glu Val Ile Lys Leu Cys Gly Gln Asn
35 40 45

gac tgg agc cgg ttc tcg atg gaa gag caa agt cct atg aca gag ttg 192
Asp Trp Ser Arg Phe Ser Met Glu Glu Gln Ser Pro Met Thr Glu Leu
50 55 60

gtt ccc caa tat aca cgg aaa gtc aaa acc ttc aac cct cac cgg tcc 240
 Val Pro Gln Tyr Thr Arg Lys Val Lys Thr Phe Asn Pro His Arg Ser
 65 70 75 80

tcc tcc tcc tgg gga aga ttc aca aac cca ggc gtc tcc cag aag aaa 288
 Ser Ser Ser Trp Gly Arg Phe Thr Asn Pro Gly Val Ser Gln Lys Lys
 85 90 95

gca aca cac act tgg gaa tct cag tca ctg ccc aac tat cag ctt aaa 336
 Ala Thr His Thr Trp Glu Ser Gln Ser Leu Pro Asn Tyr Gln Leu Lys
 100 105 110

aag gag gag ctg ctt ccg aag aca gga gtg cat tca tac cac ggt ggc 384
 Lys Glu Glu Leu Leu Pro Lys Thr Gly Val His Ser Tyr His Gly Gly
 115 120 125

aag ccc tat gtg aag agt gta aaa ttt cag aag aaa aac act gac aaa 432
 Lys Pro Tyr Val Lys Ser Val Lys Phe Gln Lys Lys Asn Thr Asp Lys
 130 135 140

atg agt acc ttc agc ggc tta ttt tgg ggg aac cat ccc cag agg aag 480
 Met Ser Thr Phe Ser Gly Leu Phe Trp Gly Asn His Pro Gln Arg Lys
 145 150 155 160

cgc aga ggt ttc gca gat aaa tgc tgt gct ata ggg tgc tcc aaa gag 528
 Arg Arg Gly Phe Ala Asp Lys Cys Cys Ala Ile Gly Cys Ser Lys Glu
 165 170 175

gag ctg gcc gtc gca tgc ctt ccg ttt gtt gat ttt ta 566
 Glu Leu Ala Val Ala Cys Leu Pro Phe Val Asp Phe
 180 185

<210> 2
 <211> 188
 <212> PRT
 <213> Rattus norvegicus

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 20 25 30
 Cys Gly Arg Asp Leu Leu Val Glu Val Ile Lys Leu Cys Gly Gln Asn
 35 40 45
 Asp Trp Ser Arg Phe Ser Met Glu Glu Gln Ser Pro Met Thr Glu Leu
 50 55 60
 Val Pro Gln Tyr Thr Arg Lys Val Lys Thr Phe Asn Pro His Arg Ser
 65 70 75 80
 Ser Ser Ser Trp Gly Arg Phe Thr Asn Pro Gly Val Ser Gln Lys Lys
 85 90 95
 Ala Thr His Thr Trp Glu Ser Gln Ser Leu Pro Asn Tyr Gln Leu Lys
 100 105 110
 Lys Glu Glu Leu Leu Pro Lys Thr Gly Val His Ser Tyr His Gly Gly
 115 120 125
 Lys Pro Tyr Val Lys Ser Val Lys Phe Gln Lys Lys Asn Thr Asp Lys
 130 135 140

Met	Ser	Thr	Phe	Ser	Gly	Leu	Phe	Trp	Gly	Asn	His	Pro	Gln	Arg	Lys
145					150					155					160
Arg	Arg	Gly	Phe	Ala	Asp	Lys	Cys	Cys	Ala	Ile	Gly	Cys	Ser	Lys	Glu
				165					170					175	
Glu	Leu	Ala	Val	Ala	Cys	Leu	Pro	Phe	Val	Asp	Phe				
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<210> 3
<211> 49
<212> DNA
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<220>
<223> Oligonucleotide zc6091

<400> 3
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<210> 4
<211> 32
<212> DNA
<213> Artificial Sequence
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<220>
<223> Oligonucleotide ZC10008
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<400> 4
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<210> 5
<211> 34
<212> DNA
<213> Artificial Sequence
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<220>
<223> Oligonucleotide ZC10491

<400> 5
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<211> 23
<212> DNA
<213> Artificial Sequence
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<220>
<223> Oligonucleotide ZC10684

<400> 6
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<210> 7
<211> 23
<212> DNA
<213> Artificial Sequence
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$\langle 220 \rangle$

<223> Oligonucleotide ZC10685

<400> 7

ctcctcgaaa cggaactggc tcc

23

<210> 8

<211> 574

<212> DNA

<213> Artificial Sequence

<220>

<223> Human testis EST

<400> 8

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gtgaaagaaa	tagaaaaact	ctgcggccat	gccaactgga	gccagttccg	tttcgaggag	180
gaaacccctt	tctcacgggt	gattgcacag	gcctcggaga	aggtcgaagc	ctacagccca	240
taccagttcg	aaagcccgcg	aaccgcttcc	ccggcccggg	gaagaggcac	aaacccagtg	300
tctacttctt	gggaagaagc	agtaaacagt	tgggaaatgc	agtcactacc	tgagtataag	360
gataaaaagg	gatattcacc	ccttggtctg	ctggagtttg	ctggaggccc	actccagatg	420
ctgtttgcct	gggtatcacc	agcagaggct	gcagaacagc	aaagattgct	gcctgttcc	480
tcctctggaa	gcttcatccc	agaggggcac	ccactagatg	ccagccagag	ctttcctgta	540
tgagtgcacat	aaggattcaa	cttcaacaga	attc			574

<210> 9

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide ZC10491

<400> 9

cgaccgccat tgcacaacgc ggagga

26

<210> 10

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide ZC10537

<400> 10

ataggaggaa aggttggttg tgacaaagaa acttg

35

<210> 11

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide ZC10538

<400> 11

gacgaattct gttgaagttg aatccttatg tcac

34

<210> 12
 <211> 703
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (17) ... (658)

<400> 12

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 1 5 10

gga ctc ctg ctg gtt cgg ttt tct cgt gaa ctg agc gac atc agc agt 100
 Gly Leu Leu Leu Val Arg Phe Ser Arg Glu Leu Ser Asp Ile Ser Ser
 15 20 25

gcc agg aag ctg tgc ggc agg tac ttg gtg aaa gaa ata gaa aaa ctc 148
 Ala Arg Lys Leu Cys Gly Arg Tyr Leu Val Lys Glu Ile Glu Lys Leu
 30 35 40

tgc ggc cat gcc aac tgg agc cag ttc cgt ttc gag gag gaa acc cct 196
 Cys Gly His Ala Asn Trp Ser Gln Phe Arg Phe Glu Glu Glu Thr Pro
 45 50 55 60

B3 ttc tca cgg ttg att gca cag gcc tcg gag aag gtc gaa gcc tac agc 244
 Phe Ser Arg Leu Ile Ala Gln Ala Ser Glu Lys Val Glu Ala Tyr Ser
 65 70 75

cca tac cag ttc gaa agc ccg caa acc gct tcc ccg gcc cgg gga aga 292
 Pro Tyr Gln Phe Glu Ser Pro Gln Thr Ala Ser Pro Ala Arg Gly Arg
 80 85 90

ggc aca aac cca gtg tct act tct tgg gaa gaa gca gta aac agt tgg 340
 Gly Thr Asn Pro Val Ser Thr Ser Trp Glu Glu Ala Val Asn Ser Trp
 95 100 105

gaa atg cag tca cta cct gag tat aag gat aaa aag gga tat tca ccc 388
 Glu Met Gln Ser Leu Pro Glu Tyr Lys Asp Lys Lys Gly Tyr Ser Pro
 110 115 120

ctt ggt aag aca aga gaa ttt tct tca tca cat aat atc aat gta tat 436
 Leu Gly Lys Thr Arg Glu Phe Ser Ser Ser His Asn Ile Asn Val Tyr
 125 130 135 140

att cat gag aat gca aaa ttt cag aag aaa cgt aga aac aaa att aaa 484
 Ile His Glu Asn Ala Lys Phe Gln Lys Lys Arg Arg Asn Lys Ile Lys
 145 150 155

acc tta agc aat ttg ttt tgg ggg cat cat ccc caa aga aaa cgc aga 532
 Thr Leu Ser Asn Leu Phe Trp Gly His His Pro Gln Arg Lys Arg Arg
 160 165 170

gga tat tca gaa aag tgt tgt ctt aca gga tgt aca aaa gaa gaa ctt 580
 Gly Tyr Ser Glu Lys Cys Cys Leu Thr Gly Cys Thr Lys Glu Glu Leu
 175 180 185

agc att gca tgt ctt cca tat att gat ttt aaa agg cta aag gaa aaa 628
 Ser Ile Ala Cys Leu Pro Tyr Ile Asp Phe Lys Arg Leu Lys Glu Lys
 190 195 200

aga tca tca ctt gta act aag ata tac taa ccattcttaga atttttttcta 678
 Arg Ser Ser Leu Val Thr Lys Ile Tyr *
 205 210

acctaataaaa agcttaataac atttta 703

<210> 13
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 13
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 20 25 30
 Cys Gly Arg Tyr Leu Val Lys Glu Ile Glu Lys Leu Cys Gly His Ala
 35 40 45
 Asn Trp Ser Gln Phe Arg Phe Glu Glu Glu Thr Pro Phe Ser Arg Leu
 50 55 60
 Ile Ala Gln Ala Ser Glu Lys Val Glu Ala Tyr Ser Pro Tyr Gln Phe
 65 70 75 80
 Glu Ser Pro Gln Thr Ala Ser Pro Ala Arg Gly Arg Gly Thr Asn Pro
 85 90 95
 Val Ser Thr Ser Trp Glu Glu Ala Val Asn Ser Trp Glu Met Gln Ser
 100 105 110
 Leu Pro Glu Tyr Lys Asp Lys Lys Gly Tyr Ser Pro Leu Gly Lys Thr
 115 120 125
 Arg Glu Phe Ser Ser Ser His Asn Ile Asn Val Tyr Ile His Glu Asn
 130 135 140
 Ala Lys Phe Gln Lys Lys Arg Arg Asn Lys Ile Lys Thr Leu Ser Asn
 145 150 155 160
 Leu Phe Trp Gly His His Pro Gln Arg Lys Arg Arg Gly Tyr Ser Glu
 165 170 175
 Lys Cys Cys Leu Thr Gly Cys Thr Lys Glu Glu Leu Ser Ile Ala Cys
 180 185 190
 Leu Pro Tyr Ile Asp Phe Lys Arg Leu Lys Glu Lys Arg Ser Ser Leu
 195 200 205
 Val Thr Lys Ile Tyr
 210

<210> 14
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Rat PC4 5' primer.

<400> 14
 tggatcccaa gggacaggac agctgtca

28

<210> 15
 <211> 28

<212> DNA
<213> Artificial Sequence

<220>
<223> Rat PC4 3' primer.

<400> 15
ggaattctgt ggtctgacct cttgtctg

28

<210> 16
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Motif.

<221> VARIANT
<222> (0)...(0)
<223> Xaa is any amino acid residue except cysteine.

<400> 16
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<210> 17
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Motif.

<221> VARIANT
<222> (0)...(0)
<223> Xaa is any amino acid residue except cysteine.

<400> 17
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<210> 18
<211> 127
<212> PRT
<213> Human

<400> 18
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Thr Ser Ser Ala Thr Ala Gly Pro Glu Thr Leu Cys Gly Ala Glu Leu
20 25 30
Val Asp Ala Leu Gln Phe Val Cys Gly Asp Arg Gly Phe Tyr Phe Asn
35 40 45
Lys Pro Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly
50 55 60
Ile Val Asp Glu Cys Cys Phe Arg Ser Cys Asp Leu Arg Arg Leu Glu
65 70 75 80

B3

Met	Tyr	Cys	Ala	Pro	Leu	Lys	Pro	Ala	Lys	Ser	Ala	Arg	Ser	Val	Arg
				85					90					95	
Ala	Gln	Arg	His	Thr	Asp	Met	Pro	Lys	Thr	Gln	Lys	Glu	Val	His	Leu
			100					105					110		
Lys	Asn	Ala	Ser	Arg	Gly	Ser	Ala	Gly	Asn	Lys	Asn	Tyr	Arg	Met	
		115					120					125			

<210>	19
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<212>	PRT
<213>	Human

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<210>	20
<211>	110
<212>	PRT
<213>	Human

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1				5					10					15	
Trp	Gly	Pro	Asp	Pro	Ala	Ala	Ala	Phe	Val	Asn	Gln	His	Leu	Cys	Gly
			20					25					30		
Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe
		35					40					45			
Phe	Tyr	Thr	Pro	Lys	Thr	Arg	Arg	Glu	Ala	Glu	Asp	Leu	Gln	Val	Gly
	50					55					60				
Gln	Val	Glu	Leu	Gly	Gly	Gly	Pro	Gly	Ala	Gly	Ser	Leu	Gln	Pro	Leu
65				70						75					80
Ala	Leu	Glu	Gly	Ser	Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys	Cys
				85					90					95	

Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 100 105 110

<210> 21
 <211> 185
 <212> PRT
 <213> Human

<400> 21
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 20 25 30
 Lys Leu Cys Gly Arg Glu Leu Val Arg Ala Gln Ile Ala Ile Cys Gly
 35 40 45
 Met Ser Thr Trp Ser Lys Arg Ser Leu Ser Gln Glu Asp Ala Pro Gln
 50 55 60
 Thr Pro Arg Pro Val Ala Glu Ile Val Pro Ser Phe Ile Asn Lys Asp
 65 70 75 80
 Thr Glu Thr Ile Asn Met Met Ser Glu Phe Val Ala Asn Leu Pro Gln
 85 90 95
 Glu Leu Lys Leu Thr Leu Ser Glu Met Gln Pro Ala Leu Pro Gln Leu
 100 105 110
 Gln Gln His Val Pro Val Leu Lys Asp Ser Ser Leu Leu Phe Glu Glu
 115 120 125
 Phe Lys Lys Leu Ile Arg Asn Arg Gln Ser Glu Ala Ala Asp Ser Ser
 130 135 140
 Pro Ser Glu Leu Lys Tyr Leu Gly Leu Asp Thr His Ser Arg Lys Lys
 145 150 155 160
 Arg Gln Leu Tyr Ser Ala Leu Ala Asn Lys Cys Cys His Val Gly Cys
 165 170 175
 Thr Lys Arg Ser Leu Ala Arg Phe Cys
 180 185

<210> 22
 <211> 185
 <212> PRT
 <213> Human

<400> 22
 Met Pro Arg Leu Phe Leu Phe His Leu Leu Glu Phe Cys Leu Leu Leu
 1 5 10 15
 Asn Gln Phe Ser Arg Ala Val Ala Ala Lys Trp Lys Asp Asp Val Ile
 20 25 30
 Lys Leu Cys Gly Arg Glu Leu Val Arg Ala Gln Ile Ala Ile Cys Gly
 35 40 45
 Met Ser Thr Trp Ser Lys Arg Ser Leu Ser Gln Glu Asp Ala Pro Gln
 50 55 60
 Thr Pro Arg Pro Val Ala Glu Ile Val Pro Ser Phe Ile Asn Lys Asp
 65 70 75 80
 Thr Glu Thr Ile Ile Ile Met Leu Glu Phe Ile Ala Asn Leu Pro Pro
 85 90 95
 Glu Leu Lys Ala Ala Leu Ser Glu Arg Gln Pro Ser Leu Pro Glu Leu
 100 105 110
 Gln Gln Tyr Val Pro Ala Leu Lys Asp Ser Asn Leu Ser Phe Glu Glu
 115 120 125

Phe Lys Lys Leu Ile Arg Asn Arg Gln Ser Glu Ala Ala Asp Ser Asn
 130 135 140
 Pro Ser Glu Leu Lys Tyr Leu Gly Leu Asp Thr His Ser Gln Lys Lys
 145 150 155 160
 Arg Arg Pro Tyr Val Ala Leu Phe Glu Lys Cys Cys Leu Ile Gly Cys
 165 170 175
 Thr Lys Arg Ser Leu Ala Lys Tyr Cys
 180 185

<210> 23
 <211> 101
 <212> PRT
 <213> Human

<400> 23
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 Leu Val Phe Ala Leu Gly Pro Ala Pro Thr Pro Glu Met Arg Glu Lys
 20 25 30
 Leu Cys Gly His His Phe Val Arg Ala Leu Val Arg Val Cys Gly Gly
 35 40 45
 Pro Arg Trp Ser Thr Glu Ala Arg Arg Pro Ala Ala Gly Gly Asp Leu
 50 55 60
 Pro Gln Thr Ser His His His Arg His His Arg Ala Ala Ala Thr Asn
 65 70 75 80
 Pro Ala Arg Tyr Cys Cys Leu Ser Gly Cys Thr Gln Gln Asp Leu Leu
 85 90 95
 Thr Leu Cys Pro Tyr
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<210> 24
 <211> 139
 <212> PRT
 <213> Human

<400> 24
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 1 5 10 15
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 20 25 30
 Pro Arg Phe Gly Lys His Leu Leu Ser Tyr Cys Pro Met Pro Glu Lys
 35 40 45
 Thr Phe Thr Thr Thr Pro Gly Gly Trp Leu Leu Glu Ser Gly Arg Pro
 50 55 60
 Lys Glu Met Val Ser Thr Ser Asn Asn Lys Asp Gly Gln Ala Leu Gly
 65 70 75 80
 Thr Thr Ser Glu Phe Ile Pro Asn Leu Ser Pro Glu Leu Lys Lys Pro
 85 90 95
 Leu Ser Glu Gly Gln Pro Ser Leu Lys Lys Ile Ile Leu Ser Arg Lys
 100 105 110
 Lys Arg Ser Gly Arg His Arg Phe Asp Pro Phe Cys Cys Glu Val Ile
 115 120 125
 Cys Asp Asp Gly Thr Ser Val Lys Leu Cys Thr
 130 135